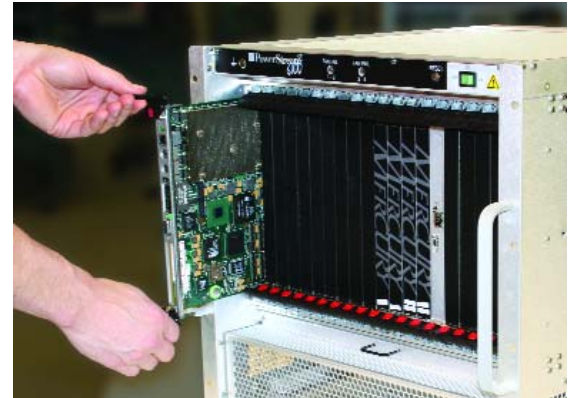


Momentum™ Series Product Overview

Performance and Value

- Top performing single-board computers
- Affordable, value-oriented solutions
- Designed for streaming I/O with high-speed fabrics
- Wide variety of form factors, processors, and operating systems
- Wide range of operating environments and life-cycle support
- Collaborative approach for rapid, standard product variations



Momentum™ Series single-board computers (SBCs) from Mercury Computer Systems offer you affordable choices for top performance in processing power, I/O bandwidth, environmental flexibility, and speed of deployment.

Broad Product Range

The Momentum Series product line has a full range of form factors to choose from: VME/VXS, CompactPCI®, AdvancedTCA®, PMC, and AMC. Commercial, rugged, and conduction-cooled boards answer your most stringent environmental requirements. Processor choices, based on your need for affordability and performance, include Intel® Core™ Duo, Core™ 2 Duo, Dual-Core Xeon®, and Pentium® M; Freescale™ 7447, 7448, and 8641D PowerPC®; and Sun UltraSPARC™. Operating systems include Linux®, VxWorks®, Windows®, and Solaris™, as well as options for Integrity® and LynxOS®.

Solutions for Your Application

Momentum Series single-board computers are used in a wide variety of solutions in the communications, industrial, and aerospace & defense industries. Using our collaborative approach, we can tailor one of our standard, commercial off-the-shelf (COTS) single-board computers to closely match your exact requirements and support your product over its full life cycle. For over 20 years, Mercury has been providing innovative solutions for the most challenging computing problems. We are focused on your success no matter how you define it: high performance, fast time to market, or cost reduction.

Featured Product

VPA-200 Dual 7448 VXS (VITA 41)

Dual Processor Streaming I/O

- *Dual independent processing nodes for high-speed computation*
- *RapidIO® on VXS P0 option*
- *Built for high-speed streaming I/O*
- *Dual PMC-X sites up to 100 MHz*
- *Access to wide ecosystem with Linux® and VxWorks® support*



The Momentum Series VPA-200 model is a full-featured 6U VME SBC that offers a higher level of computing power for users with high-density needs. The dual Freescale™ MPC7448 PowerPC processors are combined with high-bandwidth VXS functionality and a range of versatile I/O options, delivering extreme configuration flexibility to systems designers. The VPA-200's high-speed backplane interface is based on the Xilinx® Virtex™ FPGA, which is configured with support for dual 4x RapidIO.

PRODUCT HIGHLIGHTS

CX6-200 Two Dual-Core Xeon CompactPCI

- Two dual-core Intel® Xeon® processors at 1.66 GHz
- Dual DDR2-400 memory interfaces to access up to 8 GB of memory
- 4-way SMP



The Momentum™ Series CX6-200 model is a 6U CompactPCI® SBC with two dual-core Intel® Xeon® processors that delivers unprecedented levels of performance, with the dual-core processors in a single or dual processor configuration. The architecture supports up to 4-way symmetrical multiprocessing (SMP), which provides significant performance advantages for compute-intensive applications while requiring minimal porting. The numerous I/O interfaces include quad Gigabit Ethernet, RS-232 serial I/O, high-speed serial ATA-150 (SATA), USB 2.0, and SVGA.

VX6-200R/C Two Dual-Core Xeon VME/VXS

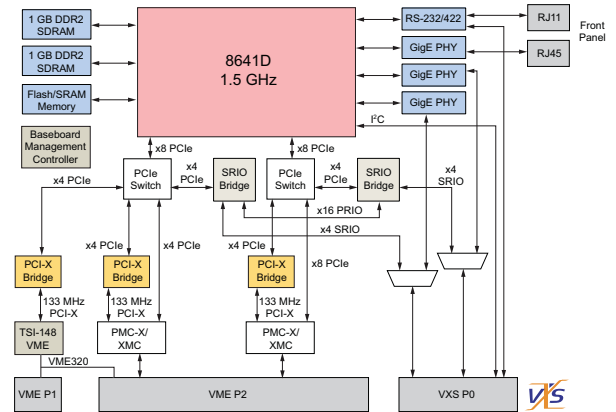
- Two dual-core Intel® Xeon® processors at 1.66 GHz
- Dual DDR2-400 memory interfaces to access up to 4 GB of memory
- Rugged/ conduction-cooled



The Momentum Series VX6-200R/C model takes the two dual-core Xeon® design from the CX6-200 and places it on a conduction-cooled VXS form factor. Just like the CompactPCI® version, the VX6-200R/C fully supports 4-way SMP. Four ports of Gigabit Ethernet are available, as well as PCIe on the P0. The VX6-200R/C is also available in an air-cooled rugged format.

VP6-100R/C Dual-Core 8641D VXS

- MPC8641D, featuring dual e600 cores at 1.33 GHz each
- Optional dual 4x serial RapidIO® or Gigabit Ethernet on P0
- Dual PMC-X/XMC sites



The Momentum Series VP6-100R/C model is a single-slot 6U VME VXS (VITA 41) rugged SBC with options for air- or conduction-cooling. It provides one dual-core MPC8641D integrated host processor subsystem node and 8 SerDes connections on P0 per VITA 41, supporting dual 4x serial RapidIO or Gigabit Ethernet. The VP6-100R/C is designed to meet the needs of a wide variety of VXS compute and/or I/O intensive applications.

CP3-200C Dual 7448 3U CompactPCI

- Single-slot 3U CompactPCI system/peripheral SBC
- Air or conduction cooling
- 512 MB of DDR4-400 SDRAM with ECC



The Momentum Series CP3-200C model is a single-slot, air/conduction-cooled, rugged 3U CompactPCI system/peripheral SBC. It provides dual Freescale MPC7448 PowerPC processors and is designed for a wide variety of compute-intensive applications in rugged environments.

AXA-110 Intel® Core™ 2 Duo AMC

- Intel® Core™ 2 Duo with 1.5-GHz core frequency
- 2 or 4 GB of 64-bit DDR2-400 SDRAM with ECC
- Up to 16 fat pipes configured to support dual 4x serial RapidIO



The Momentum Series AXA-110 model is an Intel® Core™ 2 Duo based advanced mezzanine card (AMC). It conforms to a single-width, full-height AMC module envelope. The AXA-110 incorporates the Intel® 3100 Integrated Memory Controller Hub, which supports a 667-MHz processor bus and single-channel registered DDR2-400 SDRAM with ECC. The AXA-110 offers an optional Xilinx® Virtex™-5 FPGA in the AMC Fat Pipe Region, ready for IP to implement dual 4x serial RapidIO (AMC.4).

PCR-150 Pentium M PMC

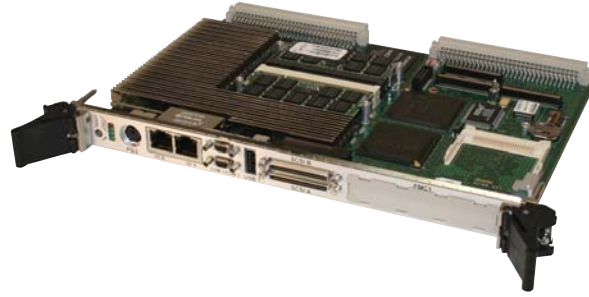
- 1.4-GHz Pentium® M in single-wide PMC form factor
- Integrated video and CompactFlash® support
- Dual Gigabit Ethernet (PICMG 2.15 compliant)



The Momentum Series PCR-150 model is an Intel Pentium M based SBC in a single-wide PMC form factor. It supports a 1.4-GHz Pentium M processor with 1-MB on-die L2 cache. The board incorporates the Intel 855GME Memory Controller that supports a 400-MHz processor bus and single-channel 64-bit DDR333 SDRAM with ECC. The PCR-150 provides a wide range of I/O and storage interfaces through the front panel and PMC P4 connector.

VC-121 Pentium M VME

- Accommodates 3 PMC-X cards
- 1.8-GHz Pentium M processor
- 1 or 2 GB of 64-bit DDR2-400 memory



The Momentum Series VC-121 model is a high-speed 1.8-GHz Intel Pentium M based 6U VME SBC. Numerous I/O options are built into the board with additional I/O available through the expansion mezzanine's three PMC-X sites. The board incorporates the Intel E7520 Memory Controller Hub (MCH), which supports a 400/533-MHz processor bus and single-channel registered DDR2-400 SDRAM with ECC. The PCI Express® interfaces provide non-blocking datapaths to various functions onboard. This SBC provides the robust memory and I/O resources needed for high-performance embedded computing and control tasks.

CCR-100 Pentium M CompactPCI

- Single-slot 6U CompactPCI SBC
- High-performance 1.8-GHz Pentium M processor
- Integrated PMC site, hard disk drive, and CompactFlash® support



The Momentum Series CCR-100 model is an Intel Pentium M based CompactPCI SBC in a 6U form factor. The board operates at 1.8 GHz and incorporates the Intel 855GME Memory Controller, which supports a 400-MHz processor bus and single-channel unbuffered DDR333 SDRAM with ECC. An Intel 6300ESB I/O controller hub handles the extensive I/O capability.

For more information on these and other Momentum Series products, visit www.mc.com.

Momentum Series Product Spectrum

Feature	VPA-200	CX6-200	VX6-200	AXA-110	VC-121	VP6-100	CP3-102	PCR-150	CCR-100
Form factor	VME64/ VXS	cPCI	VME64/ VXS	PrAMC	VME64	VXS	cPCI	PrPMC	cPCI
Processor type	7448	Xeon	Xeon	Intel Core 2 Duo	Pentium M	8641D	7448	Pentium M	Pentium M
Cores per board	2 at 1.4 GHz	4 at 1.8 GHz	4 at 1.8 GHz	2 at 1.5 GHz	1 at 1.8 GHz	2 at 1.5 GHz	2 at 1.4 GHz	1 at 1.4 GHz	1 at 1.8 GHz
DRAM	512 MB to 2 GB	2, 4, 8 GB	2, 4 GB	2, 4 GB	1, 2 GB	2 GB	512 MB	512 MB, 1 GB	1, 2 GB
Off-board fabric	2 Serial RapidIO 4x	PCIe	PCIe	Serial RapidIO		2 Serial RapidIO 4x			
GigE ports	4	2 + dual 2.16	4	4	2	3	2	2	2
I/O		USB, SATA, 1 x PCIe to rear I/O	USB	USB	2 SCSI, PATA, USB		USB, GPIO	VGA, SATA, USB	VGA, SATA, USB
Mezzanine sites	2 PMC-X	1 PMC-X/ XMC	1 PMC-X/ XMC	N/A	3 PMC-X	2 PMC-X/ XMC	None	N/A	1 PMC

For more information on the full line of Momentum Series products and services, contact your sales representative or call 866-627-6951.

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